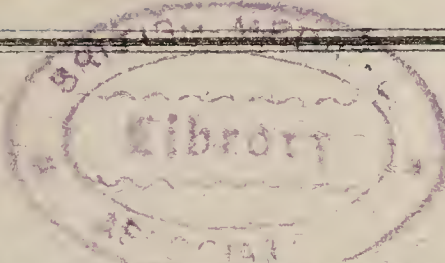


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THE URBAN DISTRICT COUNCIL OF  
WATERLOO-WITH-SEAFORTH.

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ANNUAL REPORTS

OF THE

*Medical Officer of Health*


AND OF THE

*Sanitary Inspector*

FOR THE YEAR 1908.

LIVERPOOL:  
C. TINLING & Co., LTD., PRINTERS, 53, VICTORIA STREET.

1909.



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# Annual Report for 1908.

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## **The Chairman and Members of the Urban District Council of Waterloo-with-Seaforth.**

GENTLEMEN,

I have pleasure in submitting my Thirty-fifth Annual Report as to the health and sanitary condition of your District, during the past year, together with a Report of the Sanitary Inspector.

Included in the Report are seven tables as to the Vital Statistics of the District, five of which are required by the Local Government Board, one by the Home Office, and Table (C) by the County Medical Officer of Health.

TABLE 1 deals with the vital statistics for the whole District during 1908 and 10 previous years.

TABLE 2 deals with the vital statistics of the separate localities in 1908 and 10 previous years.

TABLE 3 deals with Infectious Diseases notified during 1908.

TABLE 4 deals with causes of, and ages at death, during the year 1908.

TABLE 5 deals with Infant Mortality during 1908.

TABLE 6, is a summary of the work done under the Factory and Workshop Act, 1901.

TABLE 7 is a Summary of Report required by the County Medical Officer of Health.

The Urban District of Waterloo-with-Seaforth is situated on the estuary of the Mersey to the north of Bootle, and having on its eastern boundary agricultural land for its entire length.

There are two streams, one to the north and east, forming the northern and eastern boundary, called the Warrenhouse Gutter, and another to the south-east, which is partly the southern boundary, and is named the Rimrose Brook. They flow for a considerable distance in pipes and are more or less polluted by the drainage received before entering our District but not to such an extent as to be detrimental to health. The portions



under our control are periodically cleaned out by the owners of the land adjoining. The sub-soil is drift sand on a red sand-stone bottom, and the general configuration of the District is flat. The area of the District, exclusive of area covered by water, is 740 acres, but by the Waterloo-with-Seaforth Local Board Act, 1892, the Western boundary of the District was declared to be the line of low water mark of the lowest spring tide of the estuary of the River Mersey, which gives a total of 1,524 acres.

OPEN SPACES.—There are three recreation grounds, one at the South end of the District containing about  $1\frac{3}{4}$  acres, one near the middle of  $6\frac{1}{2}$  acres, and the Council have just completed negotiations with the owners for leasing a large piece of land to be laid out as a recreation ground adjoining the latter piece. There is also a park at the North end containing  $20\frac{1}{4}$  acres.

The population in 1901 was 23,102, and for this year it is estimated at 26,872, which is arrived at by taking the number of occupied houses and multiplying by the average number of persons per house as given in the Census of 1901.

This is purely a residential district, most persons living here having businesses in the adjoining towns of Bootle and Liverpool. There are no works established in the District, and the number of persons of the working class is not large compared with the general population.

The house accommodation provided for this latter class is good and sufficient, being built in accordance with the bye-laws in force, and supervised during erection. They are chiefly of brick with slated roofs, and have an air space at rear; the yards are paved and drained, and a water closet, together with an ashpit or ash bin, is provided.

The houses are frequently inspected as to general cleanliness of surroundings and any nuisances found are promptly dealt with. No matters came to my notice during the year which required any action to be taken under the Housing of the Working Classes Acts.

WATER SUPPLY.—This is from the Liverpool Corporation: it is constant and of excellent quality.

MILK SUPPLY.—The Cowsheds and Dairies are periodically inspected by myself and the Sanitary Inspector, and as a consequence there has been an improvement in these places during the past few years.

Samples of milk are frequently taken from the dairies under our control and are sent to the public Analysts, for chemical and bacteriological examination. One only was certified to be contaminated with "Tubercle Bacilli." Samples from outside sources are also obtained, some in the course of delivery at the Railway Station and others from floats. One sample of these milks was also found to be "tubercular." Immediate steps are taken, if the shippon is in the District, to have the herd examined by a veterinary surgeon, and the affected cows removed. If the milk is supplied from outside a note is sent to the local Authority of the District, and further samples are obtained.

**OTHER FOODS.**—The food exposed for sale in the District is inspected from time to time, but no seizure of unsound food has been made.

We have no slaughter-houses.

The Food and Drugs Acts are carried out by the County Police, under the County Council.

Sewerage and Drainage is in good condition. The Council have just finished a scheme of storm overflow sewers and enlargement of the outfall on the shore, also reconstructed with larger diameter pipes two long lengths of sewers in parts of the District which have been rapidly built up. The sewage is discharged, without treatment, into the estuary of the Mersey at low water mark in accordance with the plans approved by the Local Government Board.

**EXCREMENT DISPOSAL** is by the water carriage system, with exception of 4 privies, which are at cottages in outlying parts not provided with sewers.

**THE HOUSE REFUSE** is removed and the scavenging done by the Council's staff in an efficient manner. The refuse is deposited at a "tip," which is a portion of low-lying land rented by the Council for the purpose.

**NUISANCES.**—A large number of nuisances have been dealt with during the year. In three instances legal proceedings had to be resorted to, before the owners would comply with the notices to abate same (*vide* Sanitary Inspector's Report).

**HOUSES-LET-IN-LODGINGS.**—These houses are subject to the bye-laws in force in the District. They are visited, and every effort is used to make the occupiers keep the premises in a sanitary condition. Eleven cases of overcrowding, together with other contraventions, are reported, which have been satisfactorily dealt with.

**COMMON LODGING HOUSES.**—A draft copy of bye-laws with respect to these houses has been submitted to the Health Committee. We have no houses of this class. One application for registration of a house in Seaforth was received, but upon going into the matter the applicant withdrew his application.

**PUBLIC ELEMENTARY SCHOOLS.**—During this year measles were prevalent in several of the schools, the infants' classes being chiefly affected, and I advised that these departments be closed at three schools. The Local Government Board were notified, and after closure the schools were disinfected by the Council's staff. A number of cases of scarlet fever occurred in December amongst the children attending one school, and the premises were disinfected during the Christmas holidays.



The drains and sanitary fittings at all the schools were tested and examined, which resulted in a number of defects being found; these were remedied and improvements made in the sanitary fittings. Attention was also directed to the water supply. A report was submitted to the Education Committee with regard to the general cleanliness of the schools, and it was resolved that a copy of the report, as it affected each school, be sent to the respective managers.

**INFECTIOUS DISEASES.**—Cases of infectious disease are isolated either at home or in Hospital. After recovery or removal of the patient the bedding, clothing, etc., is taken away, and disinfected in a Washington-Lyon apparatus, and the rooms fumigated with sulphur. When this is done the owners or occupiers are called upon to do further disinfection, such as having paper scraped from walls, etc. The Hospital accommodation is good and no difficulty has occurred in getting cases removed.

**PULMONARY TUBERCULOSIS.**—Notification has not been compulsory in this District; we invite voluntary notification, and in this connection a number of rooms, bedding, etc., have been disinfected. Disinfectants are also given freely upon application.

## INFECTIOUS DISEASES NOTIFIED.

88 cases were notified to me in the Waterloo Division. These occurred in 67 houses, 64 (of which 4 died) were treated in their homes, 24 were removed to the Infectious Diseases Hospital, Liverpool, and 5 proved fatal.

In the Seaforth Division 116 cases were notified from 101 houses, 64 cases were nursed at home and 3 died; 52 cases were removed to Hospital, and all recovered.

The total number for the entire District was 204 cases in 168 houses, and 76 were removed to the Infectious Diseases Hospitals, Liverpool.

The following table gives the number of cases notified for the past 10 years :—

1899	...	...	...	<b>137</b>
1900	...	...	...	<b>131</b>
1901	...	...	...	<b>123</b>
1902	...	...	...	<b>162</b>
1903	...	...	...	<b>233</b>
1904	...	...	...	<b>152</b>
1905	...	...	...	<b>118</b>
1906	...	...	...	<b>143</b>
1907	...	...	...	<b>156</b>
1908	...	...	...	<b>204</b>

## HOSPITAL ACCOUNT.

The expenditure connected with the reception of patients into the Infectious Diseases Hospitals, Liverpool, was as follows :—

Cost of Maintenance of Patients in Liverpool Hospitals ...	£761	5	0
Cr.—Amount received during the year in respect of maintenance of Patients ... ..		99	17 8
		<hr/>	
		£661	7 4
		<hr/>	

All cases of infectious disease requiring hospital isolation are removed to the above Hospitals; an arrangement having been made with the Liverpool Corporation. The accommodation is joint, and this Council have agreed to pay a sum per week for each patient and a fee for each removal; there is no retaining fee paid.

The cases have always been promptly removed and every attention given to the patients while in Hospital.

## SCARLET FEVER.

Sixty-three cases of this disease occurred in 44 houses in the Waterloo Division, 44 were treated at home, and 2 died; 19 were removed to hospital and 3 proved fatal.

In Seaforth Division 63 cases were notified from 50 houses, 28 of the patients were nursed at home, while 35 were removed to Hospital, and all recovered.

### Number of Cases notified for the past ten years.

1899	...	...	...	<b>78</b>
1900	...	...	...	<b>77</b>
1901	..	...	...	<b>60</b>
1902	...	...	...	<b>116</b>
1903	...	...	...	<b>149</b>
1904	...	...	...	<b>66</b>
1905	...	...	...	<b>66</b>
1906	...	...	...	<b>81</b>
1907	...	...	...	<b>101</b>
1908	...	...	...	<b>126</b>

Average for the last five years, 88.

The figures for Waterloo Division show an increase again this year, the numbers being 63 as compared with 54 last year. This increase is accounted for in a great measure by the unusual number of cases which occurred, principally in December, amongst the children attending St. John's Schools.

The type of the disease was of a very mild nature and difficult of detection by the parents, so that children, I have no doubt, were sent to school mildly affected.

I specially examined the children in attendance in these schools, a few days before the Christmas vacation, and found 3 children desquamating; these were prohibited from attending school until after the holidays.

The schools were promptly disinfected after closure for the holidays.

## DIPHTHERIA AND MEMBRANOUS CROUP.

Fifteen cases were reported to me from 13 houses in the Waterloo Division, 12 were treated at home where 1 died; 3 cases were removed to Hospital and 1 proved fatal. There were 31 cases in 29 houses in Seaforth Division, 19 were nursed at home, 1 terminating fatally, 12 were removed to Hospital, and recovered. Total, 46 cases and 3 deaths.

## TYPHOID FEVER.

Four cases of this disease were notified from the same number of houses in Waterloo Division, 2 were treated at home and recovered, 2 were removed to Hospital and 1 died.

In Seaforth Division 10 cases occurred in 10 houses, 6 were nursed at home and 2 died, while 4 were removed to hospital and all recovered.

The number of cases was 14 in 14 houses in various parts of the District. Six were removed to Hospital.

### Number of Cases notified for the past ten years.

1899	...	...	...	<b>26</b>
1900	...	...	...	<b>30</b>
1901	...	...	...	<b>24</b>
1902	...	...	...	<b>16</b>
1903	...	...	...	<b>18</b>
1904	...	...	...	<b>21</b>
1905	...	...	...	<b>13</b>
1906	...	...	...	<b>23</b>
1907	...	...	...	<b>15</b>
1908	...	...	...	<b>14</b>

The average for the last five years being 17.

I am pleased to be able to say that the number of cases of this disease is again lower than last year, which was, with one exception, the lowest recorded for the past 15 years. The source of infection was not traceable in the majority of these cases, but in some instances the house drainage was tested and found defective.



## PUERPERAL FEVER.

One case of this disease was notified in the Waterloo Division, which proved fatal. This case occurred in the practice of a midwife, and I sent particulars of it to Dr. Sergeant, County Offices, Preston, who has the supervision of midwives in this district.

## MIDWIVES' ACT, 1902.

The following is a list of midwives residing in this district, and which are registered under the Midwives' Act.

NAME.	ADDRESS.
Isabella E. Routledge .....	81, Sandy Road, Seaforth.
Amy Adela Stubbs .....	61, Sandy Road, Seaforth.
Lilian M. Routledge .....	81, Sandy Road, Seaforth.
Wilhelmina Moore .....	Gladstone Road, Seaforth.
Sophia Blundell .....	23, Church Road, Seaforth.
Margaret Tyson .....	14, Rossini Street, Seaforth.
Elizabeth Telleson.....	48, Caradoc Road, Seaforth.
*Annie Navarro .....	10, Lyra Road, Waterloo.
Sarah Hopkins .....	1, Rockland Road, Waterloo.
Rebecca Butterfield .....	1, Rockland Road, Waterloo.

\* Temporarily ceased to practise.

## INFANTILE MORTALITY.

The number of deaths of infants under one year of age is 83, which gives a death rate of 130·70, per 1,000 births. Of these 13 died during the first week of life, 7 of which were premature births. Thirty-three of the infants did not live one month, 11 in all being prematurely born.

The increase of deaths this year is in my opinion to be accounted for in a great measure by the want of employment of the labouring classes, especially those connected with the docks, amongst whom great poverty at times existed.

Diarrhœal diseases accounted for 23 deaths as against 13 last year, the majority of these deaths occurred in the Seaforth Division.

The circulation of the leaflets I prepared on "Advice as to Feeding and Rearing of Infants," has been continued, and seems to be appreciated. The Registrar is supplied with copies for distribution to persons when they are registering births.

## VITAL STATISTICS.

### ZYMOTIC DEATH RATE.

The number of deaths of persons in or belonging to the district during the year from diseases of an infectious nature was 45, which is a death rate of 1·67 per 1,000 ; 17 of these were in Waterloo Division, a death rate of 1·34, and 28 in Seaforth Division, a death rate of 1·97.

During 1907, 38 deaths were reported, giving a death rate of 1·42 per 1,000, of the estimated population.

Deaths from these causes were as follows :—

	Under 5 years.	Over 5 years
Measles .....	4	—
Whooping Cough .....	3	—
Diphtheria .....	2	1
Enteric Fever.....	1	2
Diarrhoea .....	26	1
Scarlet Fever .....	3	2

### GENERAL BIRTH RATE.

There were 635 births registered in the District during the past year, viz. : 321 males and 314 females, giving a birth rate of 23·63. Of these 266 were in Waterloo Division, 130 of which were males and 136 females which gives a birth rate in this Division of 20·98. In Seaforth Division the numbers were 369, 191 males and 178 females, a birth rate of 25·99. Last year the births were 584, giving a birth rate of 21·96.

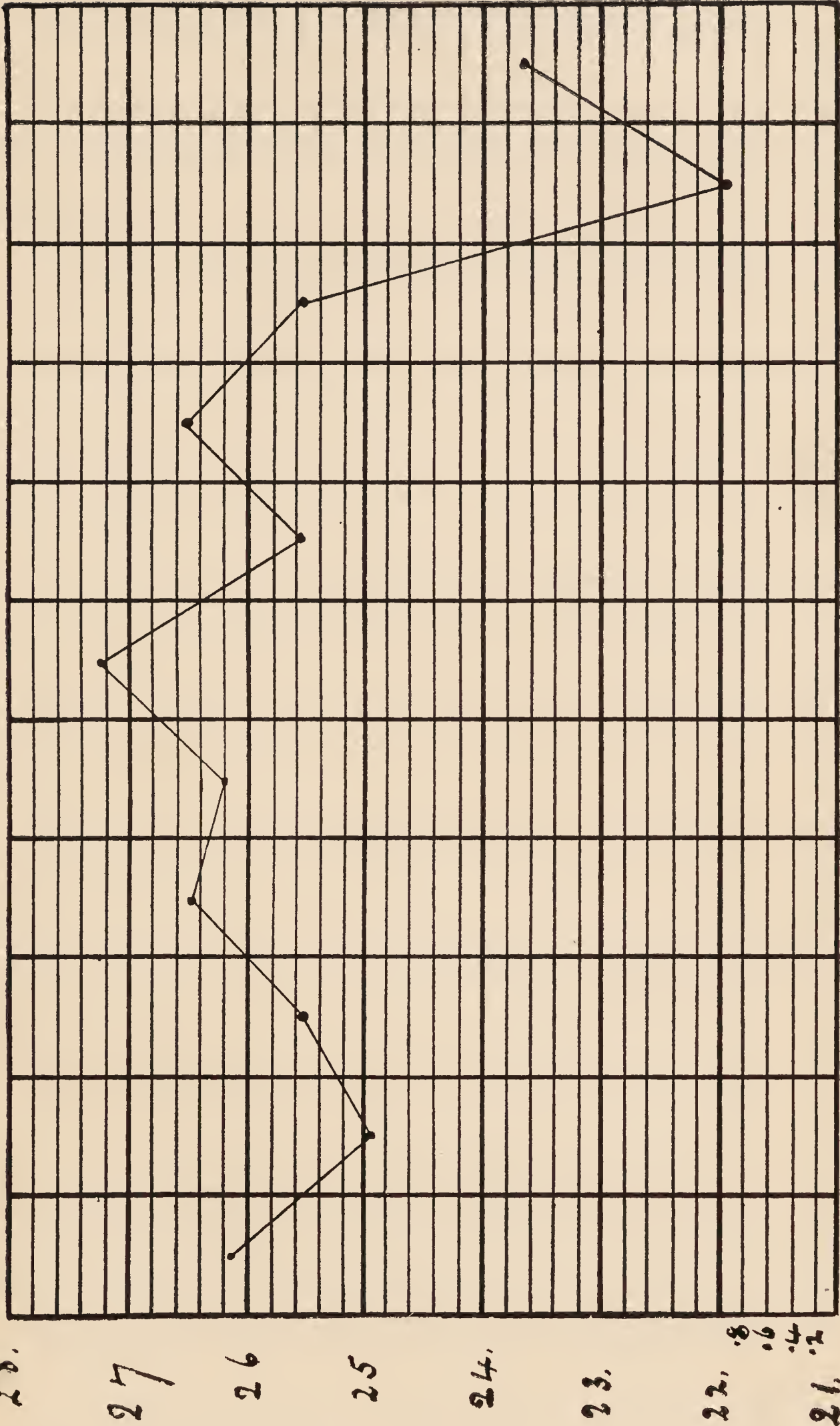
### DEATH RATE.

The deaths registered in the District during the past year numbered 290, shewing a net death rate of 10·79 per 1,000 of the estimated population, but to this number must be added the deaths of 60 residents, who died in public institutions outside the District, and a deduction made of 3 persons who died in a public institution in the District, which gives a total number of 347 deaths and a gross death rate of 12·91. Of these 156, were in Waterloo Division giving a death rate of 12·30, and 191 in Seaforth Division, a death rate of 13·45.

In 1907 there were 338 deaths, giving a death rate of 12·71 per 1,000 of the estimated population.

Chart shewing Birth Rate of Waterloo-with-Seaforth for the past 11 years, as per Column 4, Table I.

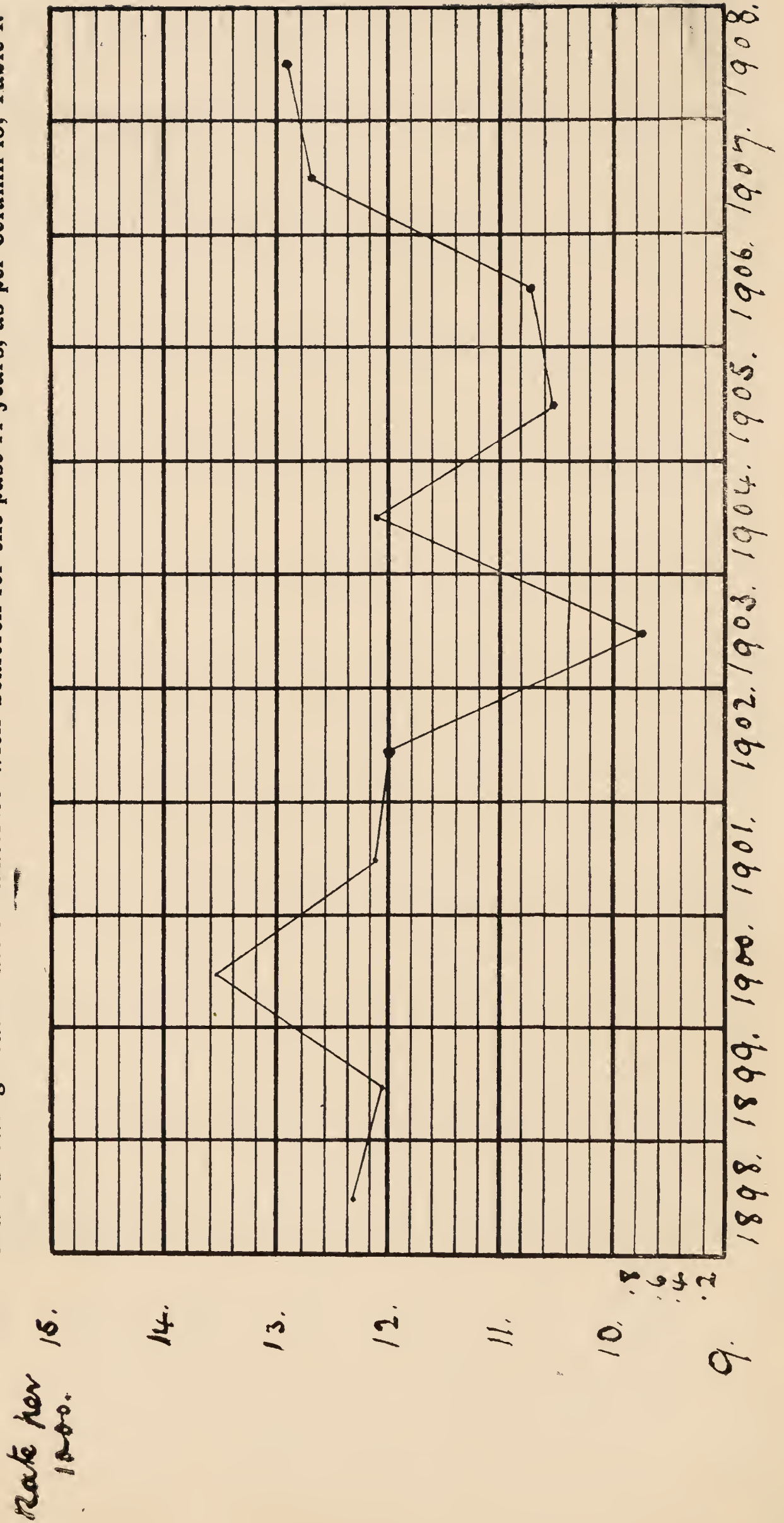
Rate per  
1000.



1898 1899. 1900. 1901. 1902 1903. 1904. 1905. 1906. 1907. 1908.



Chart shewing Death Rate of Waterloo-with-Seaforth for the past 11 years, as per Column 13, Table I.



## FACTORY AND WORKSHOP ACT, 1901.

I have made various inspections from time to time of the factories and workshops in the District, being mostly accompanied by the Sanitary Inspector. Contraventions of the Act which were found to exist were promptly dealt with; all notices served to remedy them being readily complied with.

Two cases of Scarlet Fever were reported to me, in two separate houses a part being used as a workshop. The cases were promptly removed to Hospital, the infected rooms were disinfected and all precautions taken to my satisfaction for the prevention of the spread of infectious disease.

His Majesty's Inspector of Factories has sent me a number of notices requiring the attention of myself and the Sanitary Inspector. A full report of the work done in compliance with these notices will be found in the Sanitary Inspector's Report appended to this. It was only found necessary to inform the Factory Inspector of three Workshops being without the abstract affixed. Four lists of outworkers from other Authorities were received, giving the addresses of persons who brought work to their homes from places outside the District. These houses were duly inspected.

The firms in the District employing outworkers have sent in eight lists during the year; 3 of these persons resided in the District and 12 persons were from various surrounding places, in which cases the local Authorities were notified.

### BAKEHOUSES.

There are 35 bakehouses in the District, which have been periodically inspected, and were found after minor defects had been remedied, to comply fairly with the Act. The 4 underground bakehouses are still occupied. In one of them there was a change of tenancy; after I had inspected the premises and reported favourably thereon, the Council granted the necessary certificate for its continuance. Full particulars with regard to the Workshops and Bakehouses will be found in my special report to the Secretary of State, on page 19.

## INSPECTION OF THE DISTRICT.

Systematic inspections have from time to time been made by me, throughout the entire District, accompanied by the Sanitary Inspector.

I have also made various inspections when my attention has been directed to conditions which were likely to be prejudicial to health.

The action taken arising from these inspections is given in detail in the Sanitary Inspector's Report at page 22.

## SANITARY STATE OF THE DISTRICT AT THE END OF THE YEAR.

For some months before the end of the year Scarlet Fever was prevalent in the District, as it also was in those districts surrounding us. All cases of this disease occurring in premises where isolation was difficult to carry out, were promptly removed to Hospital and all other necessary sanitary precautions taken. This action, I have reason to believe, has checked the spread of this disease, and I consider that the District is in a good sanitary state.

## BYE-LAWS.

The following Byelaws are in force in the District :—

- New Streets and Buildings.
- Park and Pleasure Grounds.
- Hackney Carriages.
- As to Nuisances.
- Houses Let in Lodgings.
- Dairies, Cowsheds and Milkshops.
- Sea Bathing and the use of the Shore.



TABLE I.

URBAN DISTRICT OF WATERLOO-WITH-SEAFORTH.  
FOR WHOLE DISTRICT.

YEAR.	Population estimated to Middle of each Year.	Births.		Total Deaths registered in the District.				Total Deaths in Public Institutions in the District.	Deaths of Non-residents registered in Public Institutions in the District.	Deaths of residents registered in Public Institutions beyond the District.	Nett Deaths at all Ages belonging to the District.	
		No.	Rate.*	Under 1 year of age.		At all Ages.					No.	Rate.*
				No.	Rate per 1,000 Births registered.	No.	Rate.*					
1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.
1898	23,058	603	26.15	96	159.20	285	12.36	...	...	...	...	...
1899	23,880	595	24.89	91	152.94	288	12.05	...	...	...	...	...
1900	+22,500	575	25.55	76	132.17	305	13.55	...	...	...	...	...
1901	23,102	611	26.44	74	121.11	281	12.15	...	...	...	...	...
1902	24,236	635	26.20	79	124.40	291	12.00	...	...	...	...	...
1903	25,175	686	27.24	69	100.58	246	9.77	...	...	...	...	...
1904	25,863	662	25.59	83	125.37	314	12.14	...	...	...	...	...
1905	26,093	692	26.52	66	95.37	275	10.53	...	...	...	...	...
1906	26,410	669	25.33	80	119.58	283	10.71	...	...	...	...	...
1907	26,587	584	21.96	74	126.71	291	10.94	...	...	47	338	12.71
Averages for years 1898-1907.	24,690	631	25.58	78	125.74	286	11.62	...	...	...	...	...
1908	26,872	635	23.63	83	130.70	290	10.79	3	3	60	347	12.91

\* Rates in Columns 4, 8, and 13 calculated per 1,000 of estimated population.

† Corrected from Census returns 1901.

NOTE.—The deaths to be included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division. The deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term “Non-residents” is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term “Residents” is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The “Public institutions” to be taken into account for the purposes of these tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums. A list of the Institutions in respect of the deaths in which corrections have been made is given on next page.

Area of District in acres (exclusive of area covered by water).....	740
Total population at all ages (at Census of 1901) .....	23,102
Number of inhabited houses „ „ .....	4,634
Average number of persons per house „ „ .....	4.75

TABLE I.—continued.

I.	II.	III.
Institutions within the District receiving sick and infirm persons from outside the District.	Institutions outside the District receiving sick and infirm persons from the District.	Other Institutions, the deaths in which have been distributed among the several localities in the District.
Augustinian Convent, Waterloo Park.	Walton Workhouse. Mill Road Infirmary, L'pool. Stanley Hospital            " Northern Hospital           " Royal Infirmary               " Children's Infirmary         " Boys' Home, Shaw St.       " Hospital for Women         " Belmont Rd. Workhouse     " Consumption Hospital     " Hahnemann Hospital       " Home for Incurables       " St. Joseph's Home          " Fever Hospitals             " Borough Hospital, Bootle.	Rainhill Asylum. Shaftesbury House Asylum, Formby.

Is the Union Workhouse within the District ?—No.

TABLE II.  
URBAN DISTRICT OF WATERLOO-WITH-SEAFORTH.

Names of Localities.	WATERLOO.				SEAFORTH			
	Population estimated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.	Population estimated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.
YEAR.	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>	<i>a.</i>	<i>b.</i>	<i>c.</i>	<i>d.</i>
1898	10,039	228	107	22	13,019	357	178	74
1899	10,331	197	116	30	13,549	398	172	61
1900	*9,646	211	125	31	*12,856	364	180	45
1901	9,839	248	107	26	13,263	363	174	48
1902	10,483	236	105	18	13,753	399	186	61
1903	10,967	251	97	23	14,208	435	149	46
1904	11,471	254	126	24	14,392	408	188	59
1905	11,685	263	119	17	14,408	429	156	49
1906	11,965	278	104	23	14,445	391	179	57
1907	12,245	230	144	25	14,342	354	194	49
Averages of years 1898 to 1907.	10,867	239	115	23	13,823	389	175	55
1908	12,677	266	156	34	14,195	369	191	49

\*Corrected from Census Returns, 1901,

TABLE III.

## URBAN DISTRICT OF WATERLOO-WITH-SEAFORTH.

CASES OF INFECTIOUS DISEASE NOTIFIED DURING  
THE YEAR 1908.

NOTIFIABLE DISEASE.	Cases Notified in whole District.							Total Cases Notified in each Locality.		No. of Cases removed to Hospital from each Locality.		
	At all Ages.	At Ages—Years.						Waterloo.	Seaforth.	Waterloo.	Seaforth.	Total Cases removed to Hospital.
		Un- der 1.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and up- wards					
Small-pox .....	...	...	...	...	...	...	...	...	...	...	...	...
Diphtheria (including Membranous Croup)	46	...	11	24	8	3	...	15	31	3	12	15
Erysipelas .....	16	...	...	3	4	5	4	5	11	...	1	1
Scarlet fever .....	126	...	36	78	8	4	...	63	63	19	35	54
Enteric fever .....	14	...	2	3	5	4	...	4	10	2	4	6
Puerperal fever.....	1	...	...	...	...	1	...	1	...	...	...	...
*Phthisis .....	1	...	...	...	...	1	...	...	1	...	...	...
Totals.....	204	...	49	108	25	18	4	88	116	24	52	76

NOTES.—The localities adopted for this table should be the same as those in Tables II. and IV.

State in space below the name of the isolation hospital, if any, to which residents in the district, suffering from infectious disease, are usually sent. Mark (H) the locality in which it is situated, or if not within the district, state where it is situated, and in what district. The name of the authority by whom the hospital is provided should also be given. Mark (W) the locality in which a workhouse is situated.

(H) Isolation Hospital, Infectious Diseases Hospital, Liverpool (Corporation of Liverpool).

(W) Walton Workhouse, Liverpool.



TABLE IV.

## URBAN DISTRICT OF WATERLOO-WITH-SEAFORTH.

CAUSES OF, AND AGES AT, DEATH DURING YEAR 1908.

CAUSES OF DEATH.	Deaths at the subjoined ages of "Residents" whether occurring in or beyond the District.							Deaths at all ages of "Residents" belonging to Localities, whether occurring in or beyond the District.		Total Deaths whether of "Residents" or "Non-Residents" in Public Institutions in the District.
	All Ages.	Under 1.	1 and under 5.	5 and under 15.	15 and under 25.	25 and under 65.	65 and upwards.	Waterloo.	Seaforth.	
Measles .....	4	2	2	...	...	...	...	2	2	...
Scarlet fever.....	5	1	2	2	...	...	...	5	...	...
Whooping-cough .....	3	2	1	...	...	...	...	...	3	...
Diphtheria (including Membranous croup)	3	1	1	1	...	...	...	2	1	...
Fever—Enteric .....	3	...	1	...	...	2	...	1	2	...
Diarrhoea .....	27	23	3	...	...	1	...	7	20	...
Enteritis .....	4	...	2	1	...	...	1	...	4	1
Puerperal fever.....	1	...	...	...	...	1	...	1	...	...
Phthisis (Pulmonary Tuberculosis) .....	25	...	...	2	5	18	...	7	18	...
Other tubercular diseases	9	2	5	1	...	1	...	4	5	...
Cancer, malignant disease .....	17	...	...	...	1	9	7	11	6	...
Bronchitis .....	28	6	1	...	...	10	11	15	13	1
Pneumonia .....	26	4	7	2	1	9	3	8	18	...
Pleurisy .....	...	...	...	...	...	...	...	...	...	...
Alcoholism, Cirrhosis of liver.....	1	...	...	...	...	1	...	1	...	...
Premature birth .....	12	12	...	...	...	...	...	6	6	...
Heart diseases .....	25	...	...	2	1	14	8	9	16	...
Accidents .....	6	1	...	...	1	3	1	2	4	...
Suicides .....	2	...	...	...	...	2	...	1	1	...
Found drowned .....	2	...	...	...	...	2	...	2	...	...
All other causes .....	144	29	4	2	3	49	57	72	72	1
All causes.....	347	83	29	13	12	122	88	156	191	3

URBAN DISTRICT OF WATERLOO-WITH-SEAFORTH.

INFANTILE MORTALITY DURING THE YEAR 1908.

Deaths from stated Causes in Weeks and Months under One Year of Age.

CAUSE OF DEATH.		Under 1 Week.	1-2 Weeks.	2-3 Weeks.	3-4 Weeks.	Total under 1 Month.	1-2 Months.	2-3 Months.	3-4 Months.	4-5 Months.	5-6 Months.	6-7 Months.	7-8 Months.	8-9 Months.	9-10 Months.	10-11 Months.	11-12 Months.	Total Deaths under one Year.
All Causes.	Certified .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	79
	Uncertified.....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4
Common Infectious Diseases.	Measles .....	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	1	2
	Scarlet Fever .....	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	Diphtheria (including Membranous Croup .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1
	Whooping Cough.....	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	2
	Diarrhoea, all forms .....	..	..	..	..	..	..	1	..	..	1	3	..	..	1	..	..	6
Diarrhoeal Diseases.	Enteritis, Mucosenteritis, Gastroenteritis .....	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	12
	enteritis .....	..	1	..	..	1	3	..	2	..	2	2	1	..	..	1	..	5
Wasting Diseases.	Gastritis, Gastrointestinal Catarrh....	..	..	..	..	..	..	..	1	1	..	2	..	..	..	..	..	12
	Premature Birth.....	7	..	..	2	11	1	..	..	..	..	..	..	..	..	..	..	5
	Congenital Defects....	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	12
Tuberculous Diseases.	Atrophy, Debility, Marasmus .....	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	..	1
	Tuber. Peritonitis; Tabes Mesenterica... Other Tuber. Diseases	..	1	..	..	1	4	1	1	..	..	..	1	..	..	..	..	9
Other Causes.	Convulsions .....	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
	Bronchitis .....	..	1	1	1	3	1	3	..	..	1	1	..	..	1	1	..	2
	Pneumonia .....	..	1	..	2	3	..	..	1	..	1	..	..	..	1	..	..	9
	Suffocation, overlying Other Causes .....	5	3	..	1	10	..	..	..	1	1	..	1	..	1	..	..	6
		13	8	3	9	33	9	5	7	3	5	8	3	..	4	4	2	10
		83	8	3	9	33	9	5	7	3	5	8	3	..	4	4	2	83

Population. Estimated to middle of 1908.....26,872. Births in the year, Legitimate, 621. Illegitimate, 14.  
Deaths in the year of Legitimate infants, 75. Illegitimate infants, 8. Deaths from all Causes at all Ages 347.

**Annual Report of the Medical Officer of Health for the year 1908,  
for the Urban District of Waterloo-with-Seaforth,**  
on the administration of the Factory and Workshop Act, 1901, in connection with  
**Factories, Workshops, Workplaces and Homework.**

1.—INSPECTION.

Including Inspections made by Sanitary Inspectors or Inspectors of Nuisances.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions
Factories (Including Factory Laundries)	3	2	...
Workshops (Including Workshop Laundries.)	173	24	...
Workplaces (Other than Outworkers' Premises included in part 3 of this Report.)	5	...	...
Total ... ..	181	26	...

2.—DEFECTS FOUND.

Particulars.	Number of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspec'r.	
<i>Nuisances under the Public Health Acts:—*</i>				
Want of cleanliness ... ..	22	22	...	...
Want of Ventilation ... ..	6	6	...	...
Overcrowding ... ..	3	3	...	...
Want of drainage of floors ... ..	3	3	...	...
Other nuisances ... ..	30	30	...	...
†Unsuitable Sanitary accommodation.	1	1	...	...
<i>Offences under the Factory and Workshop Act:</i>				
Breach of special sanitary requirements for bakehouses (SS. 97 to 100)	15	15	...	...
Total ... ..	80	80	...	...

\*Including those specified in sections 2, 3, 7 and 8. of the Factory and Workshop Act as remediable under the Public Health Acts.

†Section 22 of the Public Health Acts Amendment Act, 1890, has been adopted by the District Council.

3.—HOME WORK.

Nature of Work.	Outworkers' Lists, Section 107.					Inspections of Outworkers' Premises.
	Lists received from Employers twice in the year.			Addresses of Outworkers.		
	Lists.	Outworkers.		Received from other Councils.	Forwarded to other Councils.	
		Con-tractors.	Work-men.			
Wearing Apparel—						
(1) making, &c.	8	...	15	4	12	16
(2) cleaning and washing	...	...	...	...	...	...
Total ...	8	...	15	4	12	16



## 4.—REGISTERED WORKSHOPS.

Workshops on the Register (s. 131) at the end of the year.	Number.
Workshop, Bakehouses .....	30
Dressmakers, Milliners, and Tailors .....	47
Laundries .....	19
Total number of workshops on Register.....	*153

\*This number includes 35 on Bakehouse Register.

## 5.—OTHER MATTERS.

Class.	Number.
Matters notified to H.M. Inspectors of Factories :—	
Failure to affix Abstract of the Factory and Workshop Act (S. 133) ... ..	3
Action taken in matters referred by { Notified by H.M. H.M. Inspector as remediable { Inspector ... ..	...
under the Public Health Acts, { Reports (of action but not under the Factory and { taken) sent to Workshop Act (s. 5)... ..	...
Other ... ..	3
Underground Bakehouses (S. 101) :—	
Certificates granted during the year ... ..	1
In use at the end of the year ... ..	4

W. S. LIMRICK,

Medical Officer of Health.

February, 1909.

## COUNTY OF LANCASTER.

## SUMMARY OF MEDICAL OFFICER'S REPORT FOR 1908.

## THE URBAN DISTRICT OF WATERLOO-WITH-SEAFORTH.

Area in Statute Acres—1,524.

Population (Census) 1901—23,102.

Population (Estimated) 1908—26,872.

Name of Medical Officer of Health—W. S. Limrick. Salary, £130.

Births Registered—Male, 321; Female, 314; Total 635.

Deaths Registered (nett deaths belonging to the District)—Male, 162; Female, 185; Total, 347.

Number of Illegitimate Births registered, 14. Deaths of Illegitimates under one year of age, 8.

Birth Rate, 23·63. Death Rate, 12·91. Rate of Infant Deaths, under one year, to 1,000 Births, 130·70

Death Rate from the seven principal epidemic Diseases per 1,000 of population, 1·67, per 1,000.

Diseases prevalent?—Scarlet Fever. Period?—November and December.

What Action taken?—Isolation of patients and disinfection after recovery.

Any Schools Closed?—3. If so, for what disease?—Measles.

What is the character of the Hospital Accommodation?—For Small-pox—Good. For other Infectious Diseases—Good.

Is it Joint or otherwise?—Joint, an arrangement to pay a sum per week for each patient, and a fee for each removal, no retaining fee paid.

Number of Beds available for your District?—Patients received until Hospitals are full.

Number of cases removed from your District?—Small-pox 0, Enteric Fever 6, Diphtheria 15, Erysipelas 1, Scarlet Fever 54, Total 76.

Deaths in Hospital of patients from your District? From what causes?—Scarlet Fever 3, Diphtheria 1, Enteric Fever 1.

How is Disinfection carried out?—Houses fumigated with Sulphur; Clothing, Bedding, &c., Superheated Steam. Apparatus used—Washington-Lyon. Where situated?—In Council's Yard.

Number of cases of Infectious Disease reported under the Notification Act?—204.

Are any Diseases not specially mentioned in the Act notifiable (for instance, Measles, Whooping Cough, Diarrhoea, Chicken Pox, &c.)? If so, What are they?—No.

Has any arrangement been made for the "voluntary" notification of Phthisis?—Yes, voluntary notification invited; rooms, bedding, &c., have been disinfected.

Is Diphtheritic Anti-Toxin supplied to Medical Practitioners free of charge?—Upon application, for poor persons.

- Action taken under “ The Housing of the Working Classes Acts ”—None.
- From where is the Water Supply obtained? What is its condition?  
—Is it subject to your inspection?—Liverpool Corporation Waterworks.  
Good. Yes.
- Is Scavenging carried out satisfactorily?—Yes. How performed :—  
By Sanitary Authority, Contract, or Occupiers of Houses?—Sanitary  
Authority.
- How is the Refuse disposed of?—Tipped and buried. Has a Destructor  
been provided?—No.
- What is the character of Drainage and the form of Sewage Disposal?—  
Water-carriage, Sewage discharged into the Estuary of the Mersey.
- Canal Boats :—Number Inspected? Number of infringements of Acts?—  
None.
- What is the condition of the Bakehouses?—Satisfactory.
- What is the condition of the Slaughter Houses?—None. Has a Public  
Abattoir been provided?—No.
- What is the condition of the Lodging Houses?—None. Are they Regis-  
tered?—Sublet houses are registered.
- What is the Sanitary condition of the Schools?—Good.
- Dairies, Cowsheds, and Milkshops—Are they periodically inspected?—  
Yes. What is their condition?—Good. Have Regulations been  
made under the Order of the L.G.B.?—Yes. Are they enforced?—  
Yes. Amount of air space in cubic feet required for each cow?—  
600 cubic feet.
- Food unfit for Human Consumption :—Amount seized?—None.
- Department of Inspector of Nuisances—No. of Notices served?—488.  
Nuisances remedied?—2,099. No. of Legal Proceedings taken and  
result?—3 cases, particulars in Report.
- Closet accommodation of the District—No. of Privy Middens?—4. Pail  
Closets?—3. Fresh Water Closets?—9448, Waste Water Closets?—  
None. No. of Privy Middens converted during 1908?—To W.C.’s—4.  
To Pails, &c.—None.
- Smoke—No. of Observations?—6. No. of Legal Proceedings taken and  
result?—None. What is the time limit allowed for the emission of  
black smoke per hour?—4 minutes.
- Has the Authority adopted—(a) “ The Infectious Disease (Prevention)  
Act, 1890 ”?—Yes. (b) “ The Public Health Acts Amendment Act,  
1907 ”?—Application made, certain sections excepted. (c) “ The  
Public Health Acts Amendment Act, 1890 ”?—Yes. (d) “ The Noti-  
fication of Births Act, 1907 ”?—No.
- Notable Sanitary Improvements during 1908—Enlargement of the Sewer  
outfall on the Shore, and construction of storm overflow sewers.  
Reconstruction of Sewers in a portion of District which has been  
rapidly built up.

W. S. LIMRICK,

Medical Officer of Health.



# Sanitary Inspector's Annual Report

## FOR 1908.



TOWN HALL, WATERLOO,  
*February, 1909.*

TO THE CHAIRMAN AND MEMBERS OF THE URBAN DISTRICT COUNCIL OF  
WATERLOO-WITH-SEAFORTH.

MR. CHAIRMAN AND GENTLEMEN,

I beg to submit my Annual Report of the work done in the Sanitary Department during the past year, together with particulars of nuisances abated and improvements effected thereby.

### INSPECTION OF THE DISTRICT

In addition to the ordinary routine work involved in the investigation of complaints, &c., a large number of references from the house drain flushers have been dealt with. Also systematic house to house inspections have been made in 9 streets in both Divisions of the District.

The total number of inspections for the year being 1,554.

### NOTICES, &c., SERVED.

In consequence of the above inspections, 460 preliminary notices were served upon owners or occupiers to abate nuisances or carry out some sanitary improvement, most of which received prompt attention.

In 92 instances nuisances in connection with 109 houses were reported to the Health Committee and statutory notices ordered to be served, but it was necessary to serve only 28 notices, as the nuisances were abated between the times of Committee and Council Meetings.

The various premises were visited during the progress of the work, with the object of seeing that the notices were complied with, the number of such reinspections being 1,735.

Also 91 letters were written to owners and others calling attention to notices which had not been complied with. I have also had frequent interviews with owners, occupiers and contractors in all parts of the District, relative to works required to be done.

## SMOKE TESTING.

The smoke test has been applied 504 times to house and school drains.

This year I have had drains retested which were found defective upon the first application of the smoke machine.

There were 278 retests made, 167 drains found to be still leaking and 356 further defects were discovered. All these were made good.

This work takes up a lot of time, but the results of the first year's working show how necessary it is that this method should be continued.

Forty of the tests were at the expense of occupiers or prospective occupiers who were desirous of knowing the sanitary condition of the premises they were interested in. After the examination a report was sent to the persons who requested the application of the test.

## DRAINS.

One hundred and ninety-four defective drains have been repaired, relaid or reconstructed, the majority being found by means of the smoke machine at premises in both Divisions of the District. A number of these drains were connected direct to the sewer without the intervention of a suitable trap, 44 disconnecting traps have been fixed, inlet ventilation has been provided to 92 drains, and in 8 cases outlet ventilation has been obtained by a 4 in. shaft fixed at the head of drain and carried up above eaves of house roof. In 2 instances drains were removed from under buildings, and 3 manholes have been built.

Sixty-one choked drains have been opened and cleansed, and 50 gullies fixed in lieu of defective gullies or mason's traps.

## PRIVIES AND ASHPITS.

Four privies have been abolished and water closets provided in place of them. It was not necessary to serve notices under Section 36 of the Public Health Act, 1875, as the owners carried out the work on service of preliminary notices. Eighty galvanized iron bins have been provided in lieu of ashpits, 4 foul or defective ashpits being filled in and made good, 71 defective ashbins have been repaired or replaced and 14 premises provided with ash accommodation.

## WATER CLOSETS.

Twenty-three choked closets have been opened and cleansed, while 51 new basins and 26 new traps have been fixed in place of foul or defective ones. Ten closet apartments have been provided with improved light and ventilation; at 61 premises, defective roofs, walls, seats, floors, &c., were made good. A proper and sufficient flush of water has been provided to 47 closets, and 15 closet cisterns have been repaired.

In 14 instances foul closets were cleansed, and 132 connections of the flush pipes with closet basins made watertight.



## SOIL PIPES.

Three soil pipes have been ventilated by 4 in. shafts carried up to a safe point above eaves of roof, and 37 soil or ventilating pipes were renewed and made gastight. In 114 instances the joints of soil or ventilating pipes have been made sound, and 118 drains from such pipes repaired, while 3 connections of soil or ventilating pipes with drains, and 33 connections of closet traps with branch soil pipes have been made good. Choked ventilating pipes at 9 premises have been cleared, and unventilated traps have been removed from the foot of 2 soil pipes.

## WASTE PIPES, &c.

Untrapped and defective waste pipes have been trapped or made sound in 114 instances, and 7 lavatory and bath waste pipes have been trapped and made to discharge separately in the external air; 6 choked waste pipes were cleared, and 3 new lavatory basins fixed. Fourteen rain water conductors have been disconnected from soil pipes or drains and made to discharge over trapped gullies, and 61 rain water pipes have been made good.

## FLUSHING OF HOUSE DRAINS.

The Surveyor has furnished the following particulars of the work done in his department in connection with the flushing of house drains.

In 5,477 instances drains were found to be in a choked condition and 5,408 were cleared by the flushers at time of visit. Where they could not deal with the chokages, or other structural defects were found, a reference was made to the Sanitary Department; the number of such references being 200.

The following is a summary of the work done :—

Number of houses visited .....	13,602
Do. yard closets flushed .....	13,392
Do. yard gullies flushed .....	33,421
Do. gallons of water used.....	3,050,100
Do. references to Sanitary Dept...	200

## HOUSES LET IN LODGINGS.

I have made 58 visits to sublet houses in the District, in order to see that the premises are kept up to the requirements of the byelaws, constant supervision is necessary in this class of tenement. I often find when making a second visit, that the house is either unoccupied or through removal of one of the families it is not sublet.

Forty rooms have been measured and space sheets, together with a copy of the Regulations, served upon the chief occupiers. In 11 instances rooms were found to be overcrowded, and upon verbal or written intimation the number of occupants was reduced to be in conformity with the Regulations, by bringing more rooms into use, or by removal of one of the families.



Four skylights were repaired, and at one house a dangerous ceiling was made good. Notices were given to occupiers to cleanse four drains in connection with four houses, and in one instance to remove filthy bedding. Eight houses have been placed on the Register, and 3 struck off, which gives a total of 25 houses.

## COMMON LODGING HOUSES.

One application was received for premises in Seaforth to be registered as a Common Lodging House; the application was withdrawn after an inspection of the house, as the occupier was not prepared to carry out the requirements which were necessary.

A draft copy of byelaws with respect to Common Lodging Houses was submitted to the Health Committee for consideration.

## COWSHEDS, DAIRIES AND MILKSHOPS.

The cowsheds, dairies and milkshops have been regularly visited, and I found most of them in a clean and sanitary condition.

Four applications to be registered as cowkeepers or purveyors of milk, have been received and all were granted after an inspection of the premises.

There are 38 names of cowkeepers and purveyors of milk on the Register, to whom 258 visits have been made. Overcrowding of cows was found in 2 shippens, and the owners were warned, the excess number of cows being removed after attention was called to the contravention of the Regulations.

The limewashing and cleansing was done in every instance, although several calls had to be made to some premises before the work was completed; and in one case the matter was reported to the Health Committee, the owner did the work without any further proceedings.

The owners of several shippens were warned about the excessive quantity of manure in the middensteads.

During the year I was notified that a cow had been removed from a shippen in Seaforth and that after slaughter it was found to be affected with tuberculosis. I visited the premises and arranged with the owner to limewash and cleanse the shippen. There was one cow in excess of the number allowed, and this was removed at once. Samples of milk have been obtained from the dairy and they were certified to be "non-tubercular."

## ICE CREAM VENDORS.

The premises of manufacturers and vendors of ice-cream were visited during the summer months, and I found them in a clean condition.

## INSPECTION OF FOOD SUPPLY.

The food, &c., exposed for sale in the District, has been inspected from time to time, no seizure of unsound food was made.

## EXAMINATION OF FOODSTUFFS.

During the year I submitted 68 samples of milk, one sample of potted beef, and 3 samples of meat pie, to Professor Sir R. Boyce, for bacteriological examination, and certificates have been received with regard to all of them.

**MILK.**—Forty-three samples of milk were obtained from local purveyors and 25 from persons residing outside the District. Of the 43 samples from local purveyors 13 were certified free from contamination, the bacillus coli communis was discovered in 30 samples, in one of which the bacillus enteritidis sporogenes was also present, and the bacillus tuberculosis was found in one sample. The sample was obtained from a local dairy.

The Veterinary Inspector examined the cows in the shippens and applied the tuberculin test (Pasteur's) to those he suspected, after which all the cows he certified to be suffering from tuberculosis, were removed at once. Samples from this source have since been obtained, and they have been certified as non-tubercular.

With reference to the 25 samples obtained from persons residing outside the District, 10 were returned free from indications of contamination, the bacillus coli communis was present in 15 samples and in 3 of these the bacillus enteritidis sporogenes was also found.

The bacillus tuberculosis was certified to be present in one sample, and in 2 instances the guinea pigs died before this test was complete.

The tubercular sample was obtained in course of delivery at the Railway Station, the local dairyman was notified at once, also the information sent on to the farmer and to the Local Authority in whose District the farm is situated. A reply was received from the farmer stating she had stopped sending milk into this District, and the dairyman confirmed it.

**POTTED BEEF.**—One sample of potted beef was sent in, and the bacillus coli communis was certified to be absent.

**MEAT PIE.**—Three samples of meat pie were submitted for examination, the bacillus coli communis was found in each case, but not in excess.

In all cases where samples of milk were found to be contaminated a letter was sent by the Clerk to the Council, calling attention of the purveyor to the fact and urging strict precautions to be taken in handling and storage of same.

## FOOD AND DRUGS AND MARGARINE ACTS.

The following particulars of samples obtained under the above Act, in this District, and submitted for chemical analysis, have been furnished by Mr. Superintendent Cross.

No. of Samples Purchased.	Description of Samples.	Genuine.	Adulterated.	Remarks.
1	Lobster Paste	—	1	Fined £2 and costs, total £3 15s. 6d.
1	Vinegar	1	—	
5	Butter	5	—	
2	Pepper	2	—	
2	Mustard	2	—	
1	Cod Liver Oil	1	—	
1	Shrimp Paste	1	—	
1	Potted Lobster	1	—	
1	Brandy	1	—	
1	Whiskey	—	1	Underproof; Fined 5s. and costs.
23	Milk	20	3	Fined as follows: £1 and costs; £1 and costs; and to pay costs 14s. 2d.
39		34	5	

## FACTORY AND WORKSHOP ACT, 1901.

The workshops, workplaces and laundries in the District have been inspected, 114 visits being made. The walls and ceilings of 22 workrooms required limewashing or cleaning and in 3 the floors were dirty. Thirty-four rooms were measured and three found to be overcrowded. The ventilation was improved in three instances, while 30 nuisances were discovered in connection with workshop premises. All these matters have been attended to by the owners or occupiers.

At one workshop, it was found that a privy intended for ashes only, was being used by the workers. After service of notice the privy was abolished and a water closet provided.

Two cases of infectious disease occurred in dwelling houses attached to workshops; the patients were promptly removed to Hospital, and the premises disinfected.

Twenty-six notices of occupation of workshops, one notice about the dirty condition of walls and ceilings of a workshop, and one notice regarding insufficient ventilation to closets, have been received from H. M. Inspector of Factories, &c. The premises were visited and notices served which have been complied with.



There are 118 workshops on the Register and the Government Inspector of Workshops, &c., was notified of 2 workshops which were found unprotected.

### HOMEWORK.

Four lists have been received from outside Authorities with regard to persons residing in this District who are engaged in making wearing apparel.

The premises were inspected and found to be in order.

I have examined 8 lists of outworkers kept by firms in the District and find that 3 names are of persons who reside here ; 12 reside in other Townships of which the Local Authorities were notified. The premises here were visited and no nuisance found.

### BAKEHOUSES.

The bakehouses have been visited and found to be in a satisfactory condition. In 15 instances the cleansing of walls and ceilings of 18 rooms had not been done, at 3 premises the floors, &c., were dirty, and the ventilation was defective in 3 bakehouses. The work was done on written or verbal intimation being given.

An application for a certificate for underground bakehouse was made by a new occupier. This was granted after an inspection of the premises to see that they were kept in accordance with the Act.

One bakehouse was found to be unprotected and the Government Inspector was notified thereof. There are now 35 bakehouses on the Register and 59 visits have been made during the year.

## PUBLIC ELEMENTARY SCHOOLS.

The Health Committee's resolution instructing me to have the drains tested at the elementary schools in the District, was duly carried out.

The smoke test was applied to the drains at each of the schools and reports were sent to the managers. They had the work carried out, I retested the drains and found them gastight. At 2 schools great improvements were made in the drains and sanitary fittings.

One school was without a sufficient number of taps from the "main," for supplying drinking water. The managers are giving this matter attention.

Five schools have been disinfected after outbreaks of measles, &c.

In August I submitted a Report to the Education Committee, as to the cleanliness of the public elementary schools in the District, before reassembling of the scholars after midsummer holidays.

The school drains and sanitary conveniences are flushed once a month by the Council's staff.

## INFECTIOUS DISEASES.

Table showing the number of Infectious Cases dealt with monthly :—

Month.	Scarlet Fever.	Typhoid Fever.	Diphtheria.	Erysipelas.	Puerperal Fever.	Phthisis.	Total.	Removed to Hospital.
January ... ..	7	—	4	2	—	—	13	5
February ... ..	3	1	—	1	—	—	5	1
March ... ..	7	2	2	1	—	—	12	4
April ... ..	5	1	2	1	—	—	9	4
May ... ..	12	2	3	—	—	—	17	6
June ... ..	2	3	9	1	—	—	15	6
July ... ..	13	—	7	—	—	—	20	11
August ... ..	14	1	4	—	—	—	19	11
September ... ..	17	1	2	1	—	—	21	11
October ... ..	7	2	4	3	—	—	16	4
November ... ..	14	—	6	3	—	—	23	6
December ... ..	25	1	3	3	1	1	34	7
	126	14	46	16	1	1	204	76

In accordance with the instructions of the Medical Officer of Health, full enquiries have been made into each of the cases of infectious disease notified to him during the year. Also persons notified by Port Sanitary Authorities as having been exposed to the infection of smallpox, were visited and kept under observation.

One hundred and sixty-one intimations were sent to Head Teachers regarding school children from houses where there was infectious disease. A list of infectious cases has been supplied every week to the Librarian.

## DISINFECTION.

Five schools and 212 rooms were disinfected and cleansed, papers being scraped off the walls where necessary. In 10 instances rooms were scraped by order of the Council, in default of compliance with notices served.

The free supply of disinfecting fluid to persons, when there was infectious sickness in their homes, has been much appreciated. We have given out about 160 gallons, in special bottles with printed directions for use, and I think a great deal was done towards preventing the spread of disease.

The steam disinfecting apparatus was used 397 times, 4,712 articles of bedding, &c., being disinfected, and 82 articles were destroyed at the request of owners.

One hundred and thirty-two library and school books have been disinfected.

The following is a summary of the articles disinfected :—

Beds	...	...	246
Blankets	...	...	459
Sheets	...	...	290
Other Articles	...	...	3,717
			<hr/> 4,712 <hr/>

## REMOVAL OF HOUSE AND SHOP REFUSE.

The removal of the contents of ashpits and bins and of shop refuse is now being done in an efficient manner by the Council's own staff with hired covered carts. Whereas the pits used to be emptied 4 times a year, the men have cleared the pits 5 times during the present year and very few complaints are now received.

In accordance with a resolution of the Health Committee, a joint report upon the emptying of ashpits in the day time was submitted by the Surveyor and myself. The Committee's instruction to have the work done in the day time for 3 months, as an experiment, is being carried out, and as the refuse is being tipped direct into covered carts, no complaints have been made.

Ashpits are being abolished each year and bins substituted, also as new houses are being furnished with this kind of receptacle for house refuse, the number is constantly increasing. The number of bin emptyings reaches 2,400 per week, and refuse is removed daily from 208 shops.

The total number of emptyings for the year being 129, 106, as compared with 97,065 last year.

					Approximate weight.		
					tons.	cwts.	qrs.
3,386	loads of ashpit refuse	...	...	...	5,586	18	0
1,324	do. bin refuse	...	...	...	1,671	11	0
784	do. shop refuse	...	...	...	509	12	0
					<hr/> 7,768	<hr/> 1	<hr/> 0 <hr/>

## LEGAL PROCEEDINGS AND RESULTS.

It was found necessary to institute proceedings as follows .—

Nature of Complaint.	Act or Order under which proceedings were instituted.	Result.
Defective ash bin	Section 36, P.H.A., 1875	Council provided bin and charged owner with cost.
Defective cellar pavement	Section 94, P.H.A., 1875	Work completed, summons withdrawn on payment of costs.
Defective joint ash-pit	Section 94, P.H.A., 1875	Work completed, case withdrawn, order made for costs.



## SUMMARY OF WORK OF DEPARTMENT.

Number of houses inspected ... ..	1554
Number of houses re-inspected...	1735
Number of visits to workshops ... ..	114
Number of visits to bakehouses ... ..	59
Number of visits to cowsheds, dairies and milkshops ...	258
Number of visits to ice-cream shops ... ..	15
Number of visits to schools ... ..	97
Number of visits to sub-let houses ... ..	58
Number of visits to smallpox, &c., contacts ... ..	17
Number of times smoke test applied to house drains ...	504
Number of preliminary notices served ... ..	460
Number of statutory notices served ... ..	28
Number of houses in connection with notices ... ..	851
Number of observations taken for black smoke ... ..	6
Samples of milk submitted for bacteriological examination	68
Samples of other foodstuffs submitted for bacteriological examination ... ..	4
Cases of infectious disease reported upon ... ..	204
Number of notices served to strip and cleanse walls ...	130
Number of rooms fumigated ... ..	212
Number of schools fumigated ... ..	5
Number of times Disinfecting apparatus used ... ..	397
Articles of bedding, clothing, &c., disinfected ... ..	4712
Letters written in connection with notices ... ..	91
Number of intimations about infectious disease sent to schools	161

DETAILS OF SANITARY IMPROVEMENTS  
EFFECTED DURING THE YEAR.

## DRAINS.

Drains choked—opened and cleansed ... ..	61
Defective drainage, reconstructed, relaid or repaired ...	194
Intercepting traps fixed ... ..	44
Heads of drains ventilated with 4-inch shafts ... ..	8
Inlet ventilation provided to drains ... ..	92
Land drains disconnected from drainage system ... ..	1
Drains removed from under buildings ... ..	2
Manholes built ... ..	3
Gullies fixed in lieu of defective gullies or mason's traps ...	50
Gratings provided to existing gullies ... ..	12

## WATER CLOSETS.

Choked closets opened and cleansed ... ..	23
Closet basins and traps substituted for defective ones ...	77
Closets provided with a proper and sufficient flush of water ...	47
Defective connection of flush pipes to closets made good ...	132
Defective closet cisterns repaired or replaced ... ..	15
Defective closet walls, roofs, floors, &c., made good ... ..	61
Closet apartments lighted and ventilated ... ..	10
Foul closets cleansed ... ..	14
Defective urinals made good ... ..	6

## SOIL PIPES.

Soil pipes ventilated with 4-inch pipes ... ..	3
Joints of soil pipes made gas-tight ... ..	114
Defective drains from soil or ventilating pipes made good ...	118
Unventilated traps removed from foot of soil pipe ... ..	2
Ventilating pipe connections with drains made good ... ..	3

Soil and ventilating pipes renewed	...	...	...	...	...	37
Ventilating pipes choked—obstructions removed	...	...	...	...	...	9
Defective connections of closet traps with branch soil pipes made good	...	...	...	...	...	33
New lead junctions fixed...	...	...	...	...	...	14

## WASTE PIPES.

Defective waste pipes trapped or made good	...	...	...	...	...	114
Choked waste pipes cleared	...	...	...	...	...	6
Bath and wash basin waste pipes disconnected and made to discharge separately over gullies	...	...	...	...	...	7
New salt-glazed stoneware sinks fixed	...	...	...	...	...	15
Rain water pipes disconnected from soil pipes or drains...	...	...	...	...	...	14
Lavatory basins fixed	...	...	...	...	...	3

## WATER SUPPLY.

Premises supplied with water for domestic use...	...	...	...	...	...	14
Defective water pipes repaired	...	...	...	...	...	22
Water storage cisterns covered and cleansed	...	...	...	...	...	64
Water storage cisterns abolished	...	...	...	...	...	3
Offensive rain water cisterns emptied and cleansed, or filled in	...	...	...	...	...	7
References <i>re</i> waste of water	...	...	...	...	...	45

## FILTHY AND DILAPIDATED PREMISES.

Foul houses, walls, &c., stripped and cleansed...	...	...	...	...	...	36
Filthy house floors cleansed	...	...	...	...	...	9
Defective roofs made water-tight	...	...	...	...	...	12
Defective rain water pipes and eaves spouting made good	...	...	...	...	...	61
Choked rain water pipes and gutters cleared	...	...	...	...	...	7
Defective house walls re-pointed	...	...	...	...	...	24
Defective house floors repaired	...	...	...	...	...	6
Defective window-sashes re-hung	...	...	...	...	...	6
Defective plaster-work made good	...	...	...	...	...	2
Back yard doors fixed	...	...	...	...	...	2

## PRIVIES AND ASHPITS.

Privy middens abolished	...	...	...	...	...	4
Defective ashpits made good	...	...	...	...	...	4
Foul ashpits abolished or disused...	...	...	...	...	...	56
Galvanized iron bins provided in lieu of ashpits	...	...	...	...	...	80
Premises provided with ash accommodation	...	...	...	...	...	14
Defective ash bins replaced or made good	...	...	...	...	...	71

## MISCELLANEOUS.

Surfaces of yards repaired or repaved	...	...	...	...	...	112
Nuisances from improper keeping of animals abated	...	...	...	...	...	8
Accumulations of offensive matter removed	...	...	...	...	...	20
Middensteads repaired and drained	...	...	...	...	...	3
Nuisances from overcrowding in sleeping rooms abated	...	...	...	...	...	16
Overcrowding in cowsheds abated	...	...	...	...	...	2
Overcrowding in workrooms abated	...	...	...	...	...	3
Filthy bedding destroyed	...	...	...	...	...	2
Miscellaneous nuisances abated	...	...	...	...	...	40

I am, Gentlemen,

Your obedient Servant,

J. H. CANNELL,

Mem. Asscc. San. Inspectors ; Assoc. R. San. Inst.;

*Sanitary Inspector.*